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Patent and Trademark Office

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/262,595 03/05/99 HONDA

H P7156-9007

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WM02/0814

EXAMINER

YENKE, B

ART UNIT	PAPER NUMBER
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2614

DATE MAILED:

08/14/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No.	Applicant(s)
	09/262,595	HONDA, HIROFUMI
	Examiner BRIAN P. YENKE	Art Unit 2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-4 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1 and 3 is/are rejected.
- 7) Claim(s) 2 and 4 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 05 March 1999 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All
 - b) Some *
 - c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Drawings

1. Figure 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

The drawings (Fig 1) is objected to because there is not label (text description) next to all the numbered elements. Correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by applicants admitted prior art.

In considering claim 1,

1) the claimed calculating a right side interpolation component and a left side interpolation component for each of the present pixels is met where left (Δ) and right (\square) interpolation components are calculated for each respective pixel (\bigcirc) are calculated (Fig 3) (page 1, line 19-page 2 line 13)

2) the claimed adding the right side interpolation component...is met where right (\square) side interpolation component from pixel a (\bigcirc) and left (Δ) side interpolation

component from pixel b (○) are added together (page 2, line 1-3) to obtain data for assumption pixel (X) between pixels a and b (Fig 3).

3) the claimed the right side interpolation component...is met where where left (Δ) and right (\square) interpolation components are calculated based on central pixel (X) between pixel (c-d) (Fig 3).

Claim Rejections - 35 USC § 103

3, The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art and Kovacevic et al., US 5,661,525.

In considering claim 3,

Applicant's admitted prior art does not specifically disclose/show at least five sequential present pixels in a direction selected from a horizontal, vertical and oblique direction being used as the central present pixel and present pixels around the present pixel.

Kovacevicet discloses an interpolation method which uses vertical, linear temporal, orientational and bi-directional motion compensation interpolation.

However, Kovacevicet does not specifically disclose selecting at least 5 sequential pixels in the horizontal, vertical and oblique direction. It would be

obvious to one skilled in the art to recognize that a system which performs interpolation in each direction, would have the design option depending on bandwidth needs, processing time and accuracy to perform interpolation with the desired number of pixels.

Conclusion

Allowable Subject Matter

4. Claims 2 and 4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Prior Art does not show all limitations of independent and dependent claims to include:

Calculating an adjusting value based on central pixel and surrounding pixels,
Setting a polarity of adjusting value based on pixel data on both sides of central pixel,

Calculating the right/left side interpolation component based on $\frac{1}{2}$ value of pixel data of central pixel and the adjusting value applied with a polarity.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Yenke whose telephone number is (703) 305-

9871. The examiner can normally be reached Monday-Thursday from 7:00am to 5:30pm.

6. If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Reinhard J. Eisenzopf, can be reached at (703)305-4711. The fax number for this Group is (703)872-9314.

B.P.Y.

09 AUGUST 2001

Reinhard J. Eisenzopf 8-12-01
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